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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/220,153	12/23/1998	PETER REIMER	2981/USA/SMO	3858
32588	7590	10/17/2005	EXAMINER	
APPLIED MATERIALS, INC. 2881 SCOTT BLVD. M/S 2061 SANTA CLARA, CA 95050			BUEKER, RICHARD R	
			ART UNIT	PAPER NUMBER
			1763	
DATE MAILED: 10/17/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/220,153

Applicant(s)

REIMER ET AL.

Examiner

Richard Bueker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42,50,59 and 110-130 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42,50,59 and 113-121 is/are allowed.
- 6) ☒ Claim(s) 110-112 and 122-130 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/13/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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Claims 110-112, 123, 126 and 129 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorimer I (WO 98/48168) or Lorimer II (5,685,963), either taken in view of Beyer (5,944,049). Lorimer I and II each discloses an apparatus for processing a substrate comprising a chamber with a mechanical pump abutting the chamber, the mechanical pump exhausting gas to atmospheric pressure. Lorimer I and II teach that argon gas is supplied from source 54 through a supply line into the process chamber, and this gas supply system is a gas distributor that distributes gas in the chamber, whereby a substrate supported in the chamber is processed by the argon process gas introduced through the gas distributor into the process chamber. Lorimer I and II do not discuss the use of a pressure controller adjusting a speed of the mechanical pump. Beyer teaches (see abstract, and col. 1, lines 34-58, for example) that it is desirable to eliminate the conventionally used throttle valve of a mechanical pump (see col. 3, lines 39-54, and particularly lines 51-54, for example) by providing a pump controller for controlling the rotational speed of the mechanical pump that exhausts evacuated gas to atmospheric pressure. It would have been obvious to control the speed of the mechanical pump of Lorimer I or II because Beyer teaches that this enables the elimination of the throttle valve. Beyer (see col. 3, lines 40-54) teaches that a preferred pump for his vacuum process control apparatus is a roots pump, which is the type of pump illustrated in applicants' fig. 8b (see page 15, lines 20-33 of applicants' specification) and claimed in claims 123, 126 and 129.

Claims 122, 124, 125, 127, 128 and 130 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorimer I (WO 98/48168) or Lorimer II (5,685,963), either taken

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in view of Beyer (5,944,049) for the reasons stated above, and taken in further view of Steffens (4,983,107) and Garay (Pump Application Desk Book). Beyer teaches that a preferred pump for his vacuum process control apparatus is a roots pump, which is the type of pump illustrated in applicants' fig. 8b, and he also teaches (see col. 3, lines 40-54) that alternatively, a variety of other mechanical pumps can be used. Steffens (see col. 1, lines 11-22) and Garay (see fig. 2-9) teach that roots pumps, claw pumps and screw pumps are well known types of twin-shaft pumps, and it would have been obvious to use another similar type of pump such as a claw or screw pump as an alternative to a roots pump as the pump of Beyer.

Applicants have argued that Beyer (5,944,049) is commonly owned by applicant and is not available under 35 U.S.C 103 because a statement of common ownership was filed with the most recent response. It is noted, however, that the patent no. in the statement of common ownership (5,994,049) is not the same as the Beyer patent (5,944,049). Therefore, the statement of common ownership can't be accepted as filed.

Claims 42, 50, 59 and 113-121 are considered allowable over the prior art of record.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Bueker whose telephone number is (571) 272-1431. The examiner can normally be reached on 9 AM - 5:30 PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parvis Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Richard Bueker
Primary Examiner
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